TVA
Generation Partners
Green Power Switch®

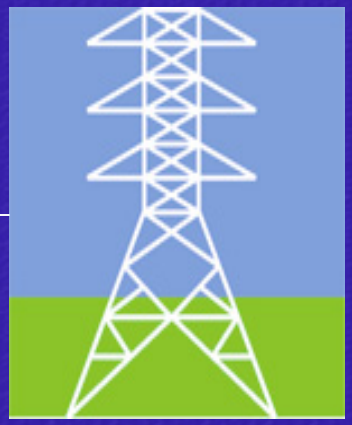
National Green Power Marketing Conference
Chicago, IL
November 3-5, 2003

Gary Harris
Manager ,Green Power Switch
Tennessee Valley Authority

TVA

- 29,500 MW
- 11 Fossil Plants
- 29 Hydroelectric Plants
- 3 Nuclear Plants
- 4 Combustion Turbine Plants
- 17 Green Power Switch Sites
- 1 Pump Storage Facility
- 17 Thousand Miles of Transmission Lines
- 158 Power Distributors, 170 Counties
- 80,000 Square Mile Service Area, 7 States
- 8.3 Million Residential Customers
- 13,000 Employees

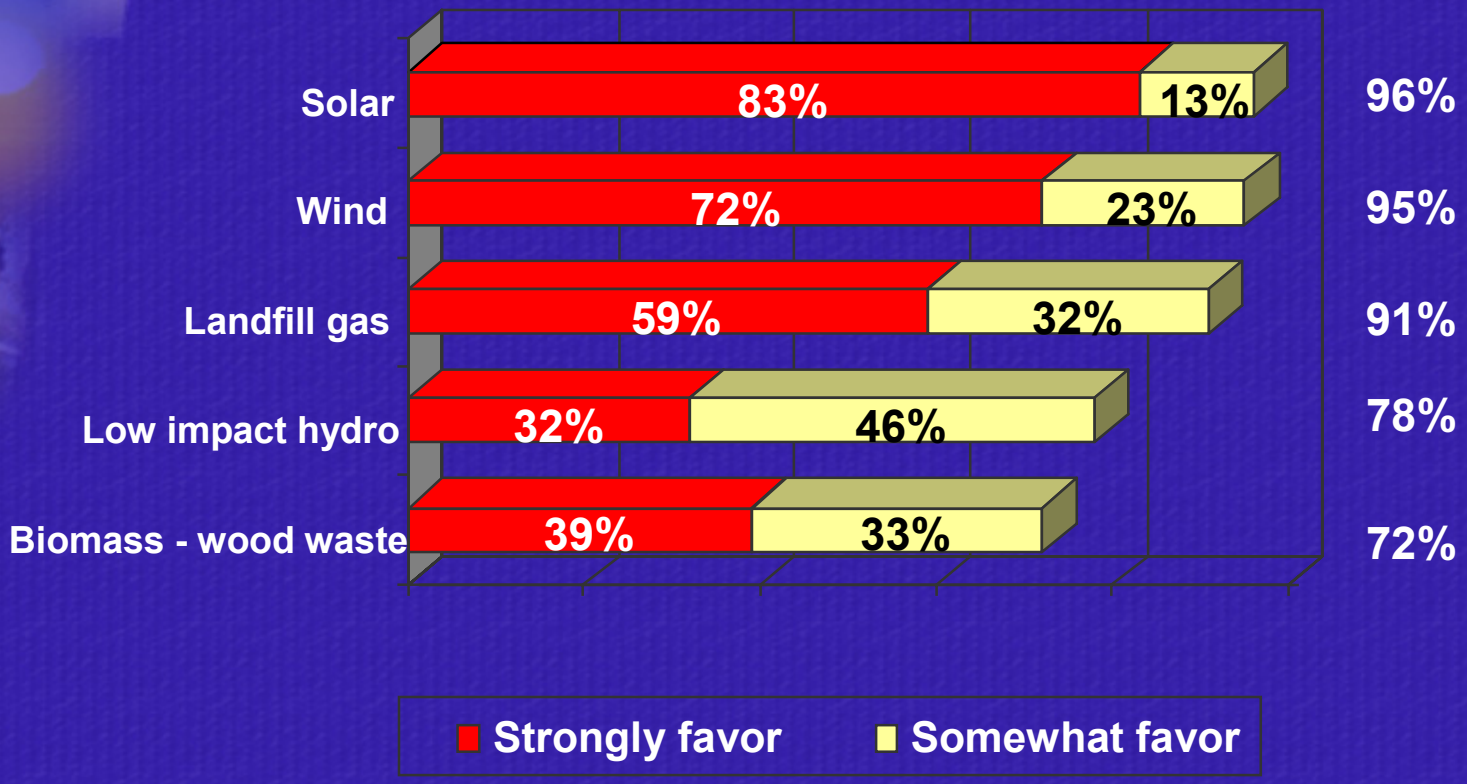
What is Green Power Switch?



=

Green Power Switch

Customer Preferences



Green Power Switch Resources

- Green Energy Resources

  - Fifteen solar sites (330 kW)

  - One wind site with three turbines (2 MW)

    *(27 MW of new wind generation planned)

  - One methane gas site (4 MW)

  - Six megawatts of generation

Solar Power Sites

- Adventure Science Museum
- Dollywood (2 sites)
- Gibson County High School
- Ijams Nature Center
- Cocke County High School
- Duffield Primary School
- Sci-Quest Science Museum
- Finley Football Stadium
- Lovers Lane Soccer Complex
- Oak Ridge National Labs
- American Museum of Science and Energy
- University of Mississippi
- Florence, Alabama Waste Water Treatment
- Mississippi State University

Solar Power Sites

- Consumer Education
- Technology Demonstration
- Marketing and Public Relations
- Dual Functionality
- Regional Attraction
- Accreditation Requirement
- Fast Construction Time


Dollywood Tram C
Pigeon Forge, TN
10 kW dc

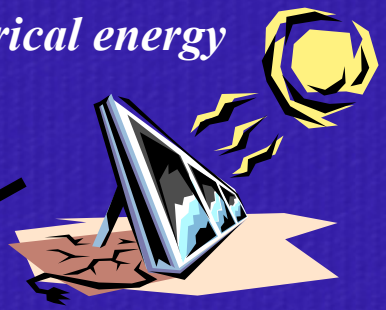

Duffel Primary School
Powell Valley, VA
10 kW dc


University of Mississippi
Intramural Sports Fields
30 kW dc

Generation Partners

Home consumes most of the energy generated, but during low demand may pass energy through to power distributor's grid

Qualified generation source creates electrical energy



A

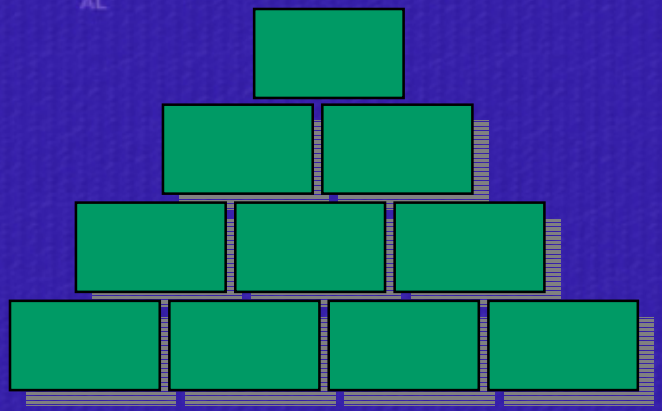
B

Whole-house meter measures net exchange of energy with power distributor

Electrical meter measures total output as Green Power Switch resource

Monthly Energy Charge = (A + B) * Distributor Retail Rate
Monthly Generation Credit = B * 15¢/kWh
Monthly Bill = Energy Charge + Customer Charge – Generation Credit

Residential Green Power Cost



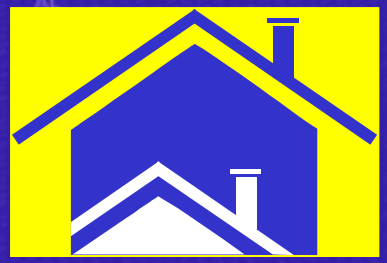
Cost = $4/Block

1 Block = 150 kWhs

150 kWhs = 12%

average monthly residential energy use

Green Power Switch Customers



Residential
7,109 sign-ups
12,339 blocks

Non-Residential
355 sign-ups
10,312 blocks

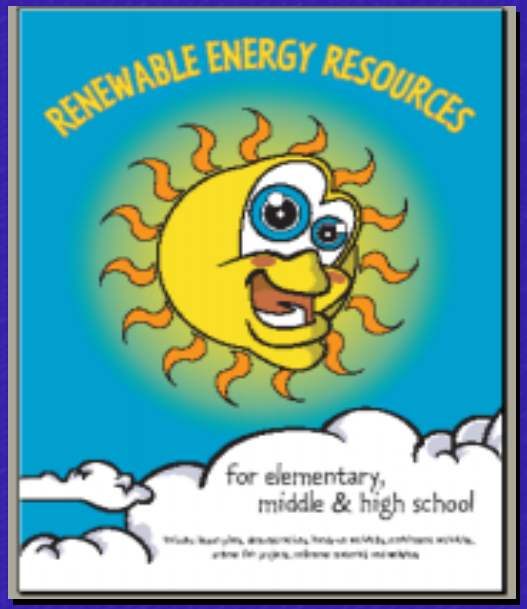
Total Blocks
22,651

School Curriculum

- A renewable energy education curriculum for grades 3 to 12
- Materials will be available on CD free of charge

The curriculum includes:

- Solar Energy
- Wind Energy
- Landfill Gas Energy



Annual Environmental Benefits

Green Power Switch Purchases			Environmental Benefits	
Number Of Blocks	GPS kWh/Month	Cost/Month	Pounds of Aluminum Recycled	Pounds of Newspapers Recycled
1	150	4	240	883
2	300	8	480	1,766
5	750	20	1,200	4,415
10	1,500	40	2,400	8,830
25	3,750	100	6,000	22,075
50	7,500	200	12,000	44,150
100	15,000	400	24,000	88,300
150	22,500	600	36,000	132,450
250	37,500	1,000	60,000	220,750
375	56,250	1,500	90,000	331,125
500	75,000	2,000	120,000	441,500

Source: Knoxville Utilities Board

Make a difference. *Make the Green Power Switch!*

For more information, visit
www.gpsgenpartners.co **or**
www.greenpowerswitch.com

Green Power Switch